## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material has a dielectric constant less than 3.6;

forming a photoresist layer in a fixed position relative to the layer of the first material;

forming at least one void through the layer of the first material in response to the photoresist layer, thereby forming a polymeric residue in response to the photoresist layer;

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes hydrogen so as to remove the photoresist layer; and

removing the polymeric residue, the step of removing the polymeric residue comprises subjecting the semiconductor wafer to a wet etch chemistry and also subjecting the semiconductor wafer to a dry plasma that includes a mixture of hydrogen, oxygen, and fluorine a plasma annealing step.

## Claims 2 - 4 (Cancelled)

- 5. (Currently Amended) The method of claim 4 <u>1</u> wherein the <u>plasma</u> annealing step comprises subjecting the semiconductor wafer to a plasma which incorporates a mixture of hydrogen and nitrogen.
- 6. (Original) The method of claim 5 wherein the mixture includes no more than 40% nitrogen.

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- 7. (Previously Presented) The method of claim 1 wherein the step of removing the polymeric residue comprises subjecting the semiconductor wafer to a combination of dilute hydrofluoric acid and an organic acid.
- 8. (Original) The method of claim 7 wherein the organic acid comprises dilute citric acid.
- 9. (Original) The method of claim 8 wherein the dilute citric acid is diluted with deionized water at a ratio between 1:50 to 1:250.
- 10. (Original) The method of claim 7 wherein the organic acid comprises dilute acetic acid.
- 11. (Original) The method of claim 8 wherein the dilute acetic acid is diluted with deionized water at a ratio on the order of 1:200.
- 12. (Original) The method of claim 7 wherein the organic acid comprises oxalic acid.
- 13. (Original) The method of claim 7 wherein the dilute hydrofluoric acid is diluted with deionized water at a ratio between 1:500 to 1:1,000.

Claims 14 - 29 (Cancelled)

30. (Original) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material is reactive with oxygen plasma;

forming a photoresist layer in a fixed position relative to the layer of the first material:

forming at least one void through the layer of the first material in response to the photoresist layer, wherein the step of forming at least one void further forms a polymeric residue in response to the photoresist layer;

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes hydrogen so as to remove the photoresist layer; and

removing the polymeric residue by subjecting the semiconductor wafer to a wet etch chemistry.

- 31. (Original) The method of claim 30 wherein the step of removing the polymeric residue comprises subjecting the semiconductor wafer to a combination of dilute hydrofluoric acid and an organic acid.
- 32. (Original) The method of claim 31 wherein the organic acid comprises dilute citric acid.
- 33. (Original) The method of claim 31 wherein the organic acid comprises dilute acetic acid.
- 34. (Original) The method of claim 31 wherein the organic acid comprises dilute oxalic acid.

- 35. (Original) The method of claim 30 wherein the hydrogen is provided from a hydrogen source selected from a group consisting of H<sub>2</sub>, NH<sub>3</sub>, N<sub>2</sub>H<sub>2</sub>, H<sub>2</sub>S, and CH<sub>4</sub>.
  - 36. (Original) The method of claim 30: wherein the gas comprises a mixture of gases; and wherein the mixture includes at least 50% hydrogen.
- 37. (Original) The method of claim 36 wherein the mixture of gases further includes a diluent.
- 38. (Original) The method of claim 37 wherein the diluent is selected from a group consisting of nitrogen, argon, helium, neon, and xenon.
  - 39. (Original) The method of claim 37: wherein the diluent comprises nitrogen; and wherein the mixture comprises 20% or less of the nitrogen.

Claims 40-50 (Cancelled)

51.(New) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material is reactive with oxygen plasma;

forming a photoreist layer in a fixed position relative to the layer of the first material;

forming at least one void through the layer of the first material in response to the photoresist layer, wherein the step of forming at least one void further forms a polymeric residue in response to the photoresist layer;

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes hydrogen so as to remove the photoresist layer; and

removing the polymeric residue by subjecting the semiconductor wafer to a dry plasma having a mixture of at least 50% hydrogen, approximately 2-20% oxygen, and approximately 2-6% fluorine.

52. (New) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material is reactive with oxygen plasma;

forming a photoreist layer in a fixed position relative to the layer of the first material;

forming at least one void through the layer of the first material in response to the photoresist layer, wherein the step of forming at least one void further forms a polymeric residue in response to the photoresist layer;

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes hydrogen so as to remove the photoresist layer; and

removing the polymeric residue by subjecting the semiconductor wafer to a dry plasma having a mixture of at approximately 80% NH<sub>3</sub>, approximately 2-7% O<sub>2</sub>, approximately 10-15% N<sub>2</sub>, and approximately 2-6% CF<sub>4</sub>.

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53. (New) The method of claim 51 wherein the dry plasma further comprises an inert gas.

54.(New) The method of claim 53 wherein the inert gas is selected from a group consisting of nitrogen, argon, xenon, helium, and neon.

55.(New) The method of claim 51:

wherein the hydrogen in the dry plasma is provided from a hydrogen source selected from a group consisting of H<sub>2</sub>, NH<sub>3</sub>, N<sub>2</sub>H<sub>2</sub>, H<sub>2</sub>S and CH<sub>4</sub>; and wherein the fluorine in the dry plasma is provided from a fluorine source selected from a group consisting of CF<sub>4</sub>, C<sub>2</sub>F<sub>6</sub>, CHF<sub>3</sub>, SF<sub>6</sub>, CH<sub>3</sub>F, and NF<sub>3</sub>.

56.(New) The method of claim 51: wherein the gas comprises a mixture of gases; and wherein the mixture includes at least 50% hydrogen.

57.(New) The method of claim 56 wherein the mixture of gases further includes a diluent.

58.(New) The method of claim 57 wherein the diluent is selected from a group consisting of nitrogen, argon, helium, neon, and xenon.

59.(New) The method of claim 57; wherein the diluent comprises nitrogen; and wherein the mixture comprises 20% or less of the nitrogen

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60. (New) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material has a dielectric constant less than 3.6;

forming a photoresist layer in a fixed position relative to the layer of the first material;

forming at least one void through the layer of the first material in response to the photoresist layer, thereby forming a polymeric residue in response to the photoresist layer;

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes hydrogen so as to remove the photoresist layer; and removing the polymeric residue, the step of removing the polymeric residue comprises subjecting the semiconductor wafer to a wet etch chemistry.

61. (New) A method of fabricating an electronic device formed on a semiconductor wafer, comprising the steps of:

forming a layer of a first material in a fixed position relative to the wafer, wherein the first material has a dielectric constant less than 3.6;

forming a photoresist layer in a fixed position relative to the layer of the first material;

forming at least one void through the layer of the first material in response to the photoresist layer; and

subjecting the semiconductor wafer to a plasma which incorporates a gas which includes a diluent and at least 50% hydrogen so as to remove the photoresist layer.

62. (New) The method of Claim 61 wherein the hydrogen is provided from a hydrogen source selected from a group consisting of H<sub>2</sub>, NH<sub>3</sub>, N<sub>2</sub>H<sub>2</sub>, H<sub>2</sub>S, and CH<sub>4</sub>.

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- 63. (New) The method of claim 61 wherein the diluent is selected from a group consisting of nitrogen, argon, helium, neon, and xenon.
  - 64. (New) The method of claim 61: wherein the diluent comprises nitrogen; and wherein the mixture comprises 20% or less of the nitrogen.
- 65. (New) The method of claim 61 wherein the gas includes approximately 80% NH $_3$  and 20% N $_2$ .
- 66. (New) The method of claim 61 wherein the first material comprises a carbon containing oxide.
- 67. (New) The method of claim 61 wherein the first material comprises fluorinated silicon glass.
- 68. (New) The method of claim 61 wherein the first material has a dielectric constant less than 2.8.